

REMARKS

Claims 10, 18, and 26 were objected to for failing to limit a previous step of the parent claim. Claims 10, 18, and 26 include the feature of determining a fault condition with the lines based on the reflection profile. This represents an additional step rather than a modification of a previous step, and therefore further limits the parent claim. Applicant respectfully requests the objection to these claims be withdrawn.

Claims 3-5, 12-14, and 20-22 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. The Office Action asserts that the step of determining a parameter of an operating recipe of a polishing tool requires the limitation of a wafer having lines having critical dimension variation as a result of being deposited over a feature having a step height. First, the claim language is described in the specification at page 13, lines 17-25. Second, to control the step height, as taught by Applicant, the polishing occurs prior to the formation of the lines, thus reducing critical dimension variation for the subsequent wafers. It would defeat the purpose of controlling the polishing tool to polish after the lines have been formed, as the step height could not be controlled without first polishing through the lines and destroying them. Applicant respectfully requests the rejection of these claims be withdrawn.

Claims 3-5, 12-14, and 20-22 stand rejected under 35 U.S.C. § 112 as failing to comply with the enablement requirement. Again, the Office Action asserts that only the polishing of wafers with lines having critical dimension variation as a result of being deposited over a feature having a step height. For the same reasons provided above, including these features defeats the purpose of the polishing control, and is contrary to the process described in the specification. Given the step height indirect measurement derived from the critical dimension variation measurement, one of ordinary skill in the art would be fully able to control polishing parameters

for subsequent wafers to reduce the step height variation, and as a result, the critical dimension variation for subsequent wafers. Applicant respectfully requests the rejection of these claims be withdrawn.

Claims 21 and 22 stand rejected under 35 U.S.C. § 112 as being indefinite for lacking antecedent basis. Claims 21 and 22 were amended to correctly depend from claim 20. Applicant respectfully requests the rejection of these claims be withdrawn.

Claims 1, 2, 6, 8-11, 15, 17-19, 23, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as being obvious over United States Patent Publication 2002/0155629 (Fairbairn) in view of Applicant Admitted Prior Art (AAPA). Claims 7, 16, and 24 stand rejected under 35 U.S.C. § 103(a) as being obvious over Fairbairn, AAPA, and United States Patent No. 6,556,652 (Mazor). Fairbairn measures the CD of lines on the wafer and controls variation between wafers. Applicant defines CD variation as the variation of the CD along the length of the line (*i.e.*, wide part of the line *vs.* narrow part of the lines). As the line traverses over underlying structures having a step height, the CD of the same line varies. Independent claims 1, 11, and 19, were amended to clarify that the CD variation measured occurs along a length of the line. Fairbairn does not teach or suggest measuring CD variation along a length of a line, only between lines on different wafers. Mazor fails to correct this defect. Accordingly, claims 1, 11, 19, and all claims depending therefrom are allowable. Applicant respectfully requests the rejection of these claims be withdrawn.

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is

requested to contact the undersigned attorney with any questions, comments or suggestions relating to the referenced patent application.

WILLIAMS, MORGAN & AMERSON
CUSTOMER NUMBER 23720

Respectfully submitted,



Scott F. Diring
Reg. No. 35,119

Attorney for Applicant

10333 Richmond Dr., Suite 1100
Houston, Texas 77042
(713) 934-7000

Date: September 4, 2003